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What is claimed is:

- 1. A dermatological delivery system comprising a topically acceptable, inert support impregnated with a metronidazole solution, said metronidazole solution including a major solvent component.
 - 2. A dermatological delivery system according to claim 1 wherein said support is a woven fiber matrix.
- 3. A dermatological delivery system according to claim 1 wherein said support is a non-woven fiber matrix.
 - 4. A dermatological delivery system according to claim 1 wherein said support is a polymeric sponge.
 - 5. A dermatological delivery system according to claim 1 wherein said support is selected from the group consisting of cotton, rayon, polyester, polypropylene, wood pulp, mohair, nylon fleece and neoprene foam, and a combination thereof.
 - 6. The delivery system according to claim 1 wherein said support is rayon and polyester.
- 7. The delivery system according to claim 1 wherein the support comprises from 20%-80% rayon and from 20%-80% polyester.
 - 8. The delivery system according to claim 1 wherein the support system is 50% polyester and 50% rayon.
 - 9. A dermatological delivery system according to claim 1 wherein said major solvent component is ethanol.
- 25 10. The delivery system according to claim 9 wherein the ethanol is present in an amount between 0%-100%.

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- 11. The delivery system according to claim 9 wherein the ethanol is present in an amount of between 50%-80%
- 12. A dermatological delivery system according to claim 1 wherein said major solvent component is water.
- 5 13. The delivery system according to claim 12 wherein the water is present in an amount between 0%-100%.
 - 14. A dermatological delivery system according to claim 1 wherein said major solvent component is a mixture of water and ethanol.
 - 15. A dermatological delivery system according to claim 1 wherein said major solvent component comprises water, ethanol or a mixture of water and ethanol, and at least one polyol.
 - 16. A dermatological delivery system according to claim 1 wherein the metronidazole is present in a concentration of from about 0.1% to about 2%.
- 15 17. The delivery system according to claim 1 wherein the metronidazole is present in a concentration of 0.75%.
 - 18. The delivery system according to claim 1 wherein the metronidazole is present in a concentration of 1.25%.
- 19. The delivery system according to claim 1 wherein the metronidazole is present in a concentration of 2.0%.
 - 20. The delivery system of claim 1 wherein the volume of said metronidazole solution delivered is from about 0.1 to about 10 ml.
 - 21. The delivery system of claim 1 wherein the volume of said metronidazole solution delivered is about 5ml.
- 25 22. The delivery system of claim 1 wherein the inert support is from about 0.5 in² to about 144 in² in area.

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- 23. The delivery system of claim 1 wherein the inert support is from about 1 in² to about 4 in² in area.
- 24. The delivery system of claim 1 wherein the inert support is from about 1 mil to about 500 mils thick.
- 5 25. The delivery system of claim 1 wherein the inert support is from about 5 mils to about 250 mils thick.
 - 26. The delivery system of claim 1 wherein the inert support is from about 10 mils to about 100 mils thick.
 - 27. A dermatological delivery system comprising a topically acceptable, inert support selected from the group consisting of cotton, rayon, polyester, polypropylene, wood pulp, mohair, nylon fleece, and neoprene foam, or combination thereof, impregnated with an about 0.1% to about 2% solution of metronidazole; said solution having a major solvent component comprising water, ethanol or a mixture of water and ethanol, said support being operable to permit application of said solution to the skin.
 - 28. A dermatological delivery system comprising an alcoholic or aqueous solution of metronidazole in an antimicrobially effective concentration impregnated on a topically acceptable, inert support which is a woven or non-woven fiber matrix or a polymeric sponge.
 - 29. The delivery system of claim 1 wherein the inert support is single use.
- 30. The delivery system of claim 1 wherein the inert support is part of a multiple dosing device having a storage means for multiple doses of metronidazole.

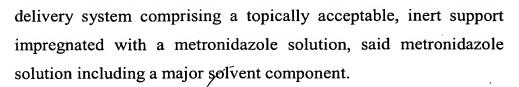
- 31. The delivery system of claim 30 wherein the multiple dosing device contains from 1-250 ml of metronidazole solution.
- 32. The delivery system of claim 30 wherein the multiple dosing device is a dab-o-matic.
- 5 33. The delivery system of claim 30 wherein the storage means comprises plastic, glass or metal.
 - 34. The delivery system of claim 30 wherein the storage means comprises one or more of the following: polyester, polypropylene, polyethylene, glass, steel or aluminum.
- 10 35. The delivery system of claim 30 wherein the multiple dosing device is pressurized.
 - 36. A dermatological delivery system as in claim 1/in which the delivery system is packaged in a light and/or oxygen blocking barrier.
- 15 37. A dermatological delivery system as in claim 36/in which the blocking barrier is selected from at least one of the following: Polyester/Polyethylene/Foil/Barex; Cellophane/Polyester/Foil/Coext ruded Polyethylene; Cellophane/Poly-ethylene/Foil/Poluethyne; Ce-llophane/Polyethylene/Foil/Surlyn;Polyester/Polyethylene/Foil/Sclair; Cellophane/Polyethylene/Foil/Foil/co-polymer Paper/Polyethylene/Foil/PET; (polyethyleneterephallate)/Polyethylene Paper/Polyethylene/Foil/Co-extruded Polyethylene; Polyester/Polyethylene/Foil/Ethylene Acrylic Acetate/Polyethylene; Polyester/Polyethylene/Polyethylene
- 25 Polyethylene/Foil/ Barex.
 - 38. A method of treating dermatological conditions comprising topical administration of an effective amount of metronidazole using a

ethylene/Foil/Ethylene Methyl Acrylate Polyethylene;

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- 39. The method of claim 38 wherein the dermatological condition is any condition suitable for treatment with topical metronidazole.
- 40. The method of claim 38 wherein the dermatological condition is rosacea.
- 41. The method of claim 38 wherein the dermatological condition is acne.
- 10 42. The method of claim 38 wherein the dermatological condition is a metronidazole susceptible infection.
 - 43. The delivery system of claim 1/2 having a metronidazole degradent content of less that 0.1%
 - 44. The delivery system of claim 43 wherein 2 methyl 5-nitrometronidazole is present at less than 1%.
 - 45. The delivery system of claim 43 wherein metronidazole 4-nitro isomer is present at less than 1%.